

## DHEC PUBLIC NOTICE

**Topic**: Proposed Research, Development and Demonstration Permit For ARC Technology, LLC

**Location**: 478 Commerce Drive in the Williamsburg Cooperative Commerce Center located approximately one mile north of the town of Kingstree off of Hwy. 52. The site is 10.2 acres in size.

The South Carolina Department of Health and Environmental Control's (SCDHEC) Solid Waste Permitting Section has received an application from ARC Technology LLC for the construction and operation of a plasma enhanced melter (PEM) facility at the above referenced location. The application is for a four-phase system consisting of individual PEM units for each phase. The construction of the phases will occur over a multi-year period. A PEM (plasma enhanced melter) unit is a thermal waste treatment system that converts wastes into a hydrogen-rich gas and a glass-like material. Waste is exposed to temperatures greater than 12,000 degrees Celsius in a controlled chamber system. Syngas that is produced is utilized for power generation of the system on site. This process reduces waste to a simpler form that can either be marketed for reuse or disposed of in a landfill. All four units are to be constructed in a 50,000 square foot building at the above referenced location.

ARC Technology LLC has requested to process non-hazardous wastes. For a more detailed description of the non-hazardous wastes to be received for processing at this facility please contact one of the persons below to view the application or receive a fact sheet. Please note, radiological pharmaceuticals will be specifically excluded from treatment at this facility.

The Plasma Enhanced Melter (PEM) system is a patented technology and SCDHEC requires a permit to be issued for this type of research, demonstration, and development project pursuant to S.C. Code Ann. Sections 44-96-10 et seq. (Supp. 2005) and 25A S.C. Code Reg. 61-107.10 Research, Development, and Demonstration Permit Criteria. The Solid Waste Permitting Section has completed the review of the permit application and found the application meets all technical requirements of Regulation 61-107.10, Research, Development, and Demonstration for solid waste management.

In addition, the Bureau of Air Quality has prepared a draft air quality construction permit and engineering calculation sheets for the facility's proposed project outlining applicable air quality requirements. If approved, this permit will enable the facility to operate in compliance with State and Federal Air Quality Regulations. The draft permit has not yet been approved and is open to comment from the public.

Who to contact? The draft permits are being public noticed in order to receive questions and comments concerning all aspects of the permit applications. Copies of both permit applications and draft permits are available by appointment for public viewing during normal working hours at the following locations:

> Bureau of Land and Waste Management SC Department of Health and Environmental Control 8911 Farrow Road Columbia, South Carolina 29203

Contact: Juli Blalock, (803) 896-4213

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Environmental Quality Control Office SC Department of Health and Environmental Control EQC Region 6 – Myrtle Beach Office 927 Shine Avenue Myrtle Beach, SC 29577

**Contact: Misty Foster, (843) 238-4378** 

Any interested person(s) may submit written comments concerning the permit application and/or draft Research, Development and Demonstration Permit to:

Ms. Joan F. Litton, Manager SC Department of Health and Environmental Control Solid Waste Permitting Section-Division of Mining and Solid Waste Mgmt 2600 Bull Street Columbia, SC 29201

Any interested person(s) may submit written comments concerning the draft Bureau of Air Quality construction permit to:

> Bureau of Air Quality SC Department of Health and Environmental Control 2600 Bull Street Columbia, SC 29201

**Contact: Kirk Schneider, (803) 898-4023** 

To be considered all comments or requests should be received no later than 5 p.m. on May 5, 2006, at which time the public comment period will end.